

#### **EXECUTIVE SUMMARY**

Date Summary Prepared: September 18, 2003

Mine Name: Bright Project	<b>I.D. Number:</b> M/021/030
Operator: Neil Bradshaw et al	Date Original Notice Received: Dec. 9, 2002
Address: P.O. Box 1054	County: Iron County
Cedar City, Utah 84721	New/Existing: Status changing from SMO to LMO
	Mineral Ownership: BLM
<b>Telephone:</b> 435-586-1175	Surface Ownership: BLM
Contact Person: Neil Bradshaw	Lease No.(s):
<b>Telephone:</b> 435-586-1175	Permit Term: Life of Mine

Life of Mine: 10 years

Legal Description: T35S, R17W - SE¼SE¼ of Sec 21, SW¼SW¼SW¼ of Sec 22, NW¼ of Sec 27, E½E½ of

Sec 28, NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> of Sec 33, SLBM, Iron County, Utah

Mineral(s) to be Mined: Altered flow-banded rhyolite

Acres to be Disturbed: 18.9

Present Land Use: Grazing and wildlife habitat

Postmining Land Use: Grazing and wildlife habitat

Variances from Reclamation Standards (Rule R647) Granted: None Requested

## Soils and Geology

Soil Description: Most of the soils are in the Checkett-Rock Outcrop complex, but there are some areas of Dixie gravelly loam soils. The areas being mined have very shallow soils over bedrock, and this grades down to very deep soils (greater than five feet) in the valley bottom. The deeper soils have argillic horizons below about six inches and very alkaline conditions below about 15 inches.

**pH**: 7.6 - 8.0

**Special Handling Problems**: No special problems noted.

Geology Description: The project disturbances fall within domes and flows of the Miocene-aged (about 10 million years old) Beryl Junction Rhyolite. The Beryl Junction Rhyolite has been subdivided into three members; an upper flow member up to 100' thickness, a middle volcaniclastic member up to 200' in thickness and a low flow member up to 400' in thickness. The unaltered rocks in each of the members are gray to purplish-red, and in places have been altered to light purple to pink, various mottled red and white colorations.

#### Hydrology

Ground Water Description: Depth to groundwater ` 160'

Surface Water Description: There are no bodies of water located near the site. Ephemeral drainages located near the site do not show any indication of recent water flow.

Water Monitoring Plan: None required

## **Ecology**

Vegetation Type(s); Dominant Species: Wyoming Big Sagebrush 50%. Indian Ricegrass 15%. Galleta 15%

Percent Surrounding Vegetative Cover: 35%

Wildlife Concerns: None

Surface Facilities: None have been proposed.

### Mining and Reclamation Plan Summary:

# **During Operations:**

As quarries are mined out, these areas will be partially backfilled with any reject raw quarried rock together with unmarketable surplus processed material.

## **After Operations:**

Quarry areas will be partially backfilled with both waste rock and surplus/unmarketable material process fines, placement of fines on pit floors, replacement of salvaged topsoil onto the screened fines and broadcast seeding. Quarry highwalls will be reduced to 45 degrees or less either by cutting back the wall, or backfilling against the highwall with waste rock.

Reclamation of processing areas will consist of regrading to conform to the approximate original contours. After the salvaged topsoil is respread, composted manure will be applied, followed by ripping the surface 18" to 24" deep and broadcast seeding with an approved seedmix suited to the postmining landuse.

# **Surety**

Amount: \$48,300

Form: Unknown at this time
Renewable Term: 2008

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